



Joseph F. Antognini, M.D.

Clinical Interests	Dr. Antognini's clinical interests include the mechanisms of anesthesia and factors that influence anesthetic requirements. His research focuses on the effects of selective delivery of anesthetics to the brain, anesthetic effects on the electroencephalogram and pain processing in the spinal cord.
Title	Director, Perioperative Services Professor
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Internships	UC Davis Medical Center, Sacramento, California, 1984
Residency	UC Davis Medical Center, Sacramento, California, 1987
Professional Memberships	American Society of Anesthesiologists California Society of Anesthesiologists
Select Recent Publications	Antognini JF. Adventures in anesthetic mechanisms. <i>Anesthesiology</i> . 2012 Mar;116(3):701-4. Singh A, Antognini JF. Perioperative hypotension and myocardial ischemia: diagnostic and therapeutic approaches. <i>Ann Card Anaesth</i> . 2011 May-Aug;14(2):127-32. Singh A, Antognini JF. Perioperative pharmacology in elderly patients. <i>Curr Opin Anaesthesiol</i> . 2010 Aug;23(4):449-54. Tautz TJ, Urwyler A, Antognini JF, Riou B. Case scenario: Increased end-tidal carbon dioxide: a diagnostic dilemma. <i>Anesthesiology</i> . 2010 Feb;112(2):440-6. Talavera JA, Esser SK, Amzica F, Hill S, Antognini JF. Modeling the GABAergic action of etomidate on the thalamocortical system. <i>Anesth Analg</i> , 108(1): 160-7, 2009. Barter LS, Mark LO, Antognini JF. Proprioceptive function is more sensitive than motor function to



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desflurane anesthesia. *Anesth Analg*, 108(3): 867-72, 2009.

Barter LS, Mark LO, Jinks SL, Carstens EE, Antognini JF. Immobilizing doses of halothane, isoflurane or propofol, do not preferentially depress noxious heat-evoked responses of rat lumbar dorsal horn neurons with ascending projections. *Anesth Analg*, 106(3): 985-90, 2009.

Jinks SL, Carstens E, Antognini JF. Nitrous oxide-induced analgesia does not influence nitrous oxide's immobilizing requirements. *Anesth Analg*. 2009 Oct;109(4):1111-6.

Jinks SL, Carstens E, Antognini JF. Nitrous oxide-induced analgesia does not influence nitrous oxide's immobilizing requirements. *Anesth Analg*, 109(4): 1111-6, 2009.

Judge O, Hill S, Antognini JF. Modeling the effects of midazolam on cortical and thalamic neurons. *Neurosci Lett*. 2009 Oct 23;464(2):135-9. Epub 2009 Aug 20.

Judge O, Hill S, Antognini JF. Modeling the effects of midazolam on cortical and thalamic neurons. *Neurosci Lett*, 464(2): 135-9, 2009.

Kungys G, Kim J, Jinks SL, Atherley RJ, Antognini JF. Propofol produces immobility via action in the ventral horn of the spinal cord by a GABAergic mechanism. *Anesth Analg*, 108(5): 1531-7, 2009.

Barter LS, Carstens EE, Jinks SL, Antognini JF. Rat dorsal horn nociceptive-specific neurons are more sensitive than wide dynamic range neurons to depression by immobilizing doses of volatile anesthetics: an effect partially reversed by the opioid receptor antagonist naloxone. *Anesth Analg*. 2009 Aug;109(2):641-7.

Barter LS, Carstens EE, Jinks SL, Antognini JF. Rat dorsal horn nociceptive-specific neurons are more sensitive than wide dynamic range neurons to depression by immobilizing doses of volatile anesthetics: an effect partially reversed by the opioid receptor antagonist naloxone. *Anesth Analg*, 109(2): 641-7, 2009.

Rivera R, Antognini, JF. Perioperative drug therapy in elderly patients. *Anesthesiology*, 110(5): 1176-81, 2009.

Shnayderman D, Laster MJ, Eger EI, Oh I, Zhang Y, Jinks SL, Antognini JF, Raines DE. Increases in spinal cerebrospinal fluid potassium concentration do not increase isoflurane minimum alveolar concentration in rats. *Anesth Analg*, 107(3): 879-84, 2008.

Yao A, Kim J, Atherley R, Jinks SL, Carstens E, Shargh S, Sulger A, Antognini JF. The effects of aromatic anesthetics on dorsal horn neuronal responses to noxious stimulation. *Anesth Analg*, 106(6): 1759-64, 2008.

Barter LS, Antognini JF. Kinetics and potency of halothane, isoflurane, and desflurane in the Northern Leopard frog *Rana pipiens*. *Vet Res Commun*, 32(5): 357-65, 2008.

Antognini JF, Atherley RJ, Dutton RC, Laster MJ, Eger EI, Carstens E. The excitatory and inhibitory



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effects of nitrous oxide on spinal neuronal responses to noxious stimulation. *Anesth Analg*, 104(4): 829-35, 2007.

Antognini JF, Raines DE, Solt K, Barter LS, Atherley RJ, Bravo E, Laster MJ, Jankowska K, Eger EI. Hexafluorobenzene acts in the spinal cord, whereas o-difluorobenzene acts in both brain and spinal cord, to produce immobility. *Anesth Analg*, 104(4): 822-8, 2007.

Kim J, Atherley R, Werner DF, Homanics GE, Carstens E, Antognini JF. Isoflurane depression of spinal nociceptive processing and minimum alveolar anesthetic concentration are not attenuated in mice expressing isoflurane resistant gamma-aminobutyric acid type-A receptors. *Neurosci Lett*, 420(3): 209-12, 2007.

Barter LS, Mark LO, Smith AC, Antognini JF. Isoflurane Potency in the Northern Leopard Frog *Rana pipiens* is Similar to That in Mammalian Species and is Unaffected by Decerebration. *Vet Res Commun*, 31(6): 757-63, 2007.

Hemings, Jr. HC, Antognini JF. Do general anesthetics add up? *Anesthesiology*, 104(6):1120-1122, 2006.

Barter LS, Hawkins MG, Brosnan RJ, Antognini JF, Pypendop BH. Median effective dose of isoflurane, sevofurane and desflurane in green iguanas. *American Journal of Veterinary Medicine*, 67(3):392-397, 2006.

Leduc ML, Atherley R, Jinks SL, Antognini JF. Nitrous oxide depresses electroencephalographic responses to repetitive noxious stimulation in the rat. *British Journal of Anaesthesia*, 96(2):216-221, 2006.

Mitsuyo T, Antognini JF, Carstens E. Etomidate depresses lumbar dorsal horn neuronal responses to noxious thermal stimulation in rats. *Anesthesia and Analgesia*, 102(4):1169-1173, 2006.

Orth M, Bravo E, Barter L, Carstens E, Antognini JF. The differential effects of halothane and isoflurane on electroencephalographic responses to electrical microstimulation of the reticular formation. *Anesthesia and Analgesia*, 102(6):1709-1714, 2006.

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